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| APPLICATION NO.                  | FILING DATE |  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.                      | CONFIRMATION NO |  |
|----------------------------------|-------------|--|----------------------|--|-----------------|--|
| 10/618,021                       | 07/14/2003  |  | Bao-Chi Peng         | LEE0012-US                               | 4012            |  |
| 7590 06/03/2005                  |             |  |                      | EXAMINER                                 |                 |  |
| Michael D. Be                    | ednarek     |  | NGUYEN, KHAI MINH    |  |                 |  |
| Shaw Pittman I<br>1650 Tysons Bo |             |  | ART UNIT             | PAPER NUMBER                             |                 |  |
| McLean, VA                       |             |  | 2687                 |  |                 |  |
|                                  |             |  |                      | D. ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( | _               |  |

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   | Ар   | plication No.   | Applicant(s)  |                     |  |  |  |  |
|--|---|--|---|---|---------------------|--|--|--|--|
| Office Action Summary  |   |  | /618,021  | PENG, BAO-CHI   |                     |  |  |  |  |
|  |   |  | aminer  | Art Unit  |                     |  |  |  |  |
|  |   | Kh   | ai M Nguyen   | 2687  |                     |  |  |  |  |
|  | The MAILING DATE of this communic   |  | - ·   | the correspondence ad                                       | Idress              |  |  |  |  |
| Period for Reply   |   |  |   |   |                     |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |  |   |   |                     |  |  |  |  |
| Status   |   |  |   |   |                     |  |  |  |  |
| 1)  又  | Responsive to communication(s) filed  | on <i>14 July 2</i>                                  | 003.  |   |                     |  |  |  |  |
| ,—   | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  |  |   |   |                     |  |  |  |  |
| ,  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. |  |   |   |                     |  |  |  |  |
| Dispositi  |   |  |   |   |                     |  |  |  |  |
| Disposition of Claims  4) ☐ Claim(s) 1-17 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1.9 and 10 is/are rejected.  7) ☐ Claim(s) 2-8 and 11-17 is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement.   |   |  |   |   |                     |  |  |  |  |
| Applicat   | ion Papers  |  |   |   |                     |  |  |  |  |
| 10)⊠   | The specification is objected to by the The drawing(s) filed on 14 July 2003 in Applicant may not request that any object Replacement drawing sheet(s) including The oath or declaration is objected to           | s/are: a)⊠ a<br>tion to the draw<br>the correction i | ring(s) be held in abeyance<br>s required if the drawing(s) | . See 37 CFR 1.85(a). is objected to. See 37 C              |                     |  |  |  |  |
| Priority (   | under 35 U.S.C. § 119   |  |   |   |                     |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |   |  |   |   |                     |  |  |  |  |
| 2)  Notion (3)  Information (3)  | nt(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (Pirmation Disclosure Statement(s) (PTO-1449 or ler No(s)/Mail Date   |  | Paper No(s)/  | nmary (PTO-413)<br>Mail Date<br>rmal Patent Application (PT | <sup>-</sup> O-152) |  |  |  |  |

### **DETAILED ACTION**

## **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119 (a)-(d), which papers have been placed of record in the file.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Claims 1, and 9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Subrahmanya (U.S.Pub-20040125771).

Regarding claim 1, Subrahmanya teaches a method for estimating a movement speed of a mobile unit in a mobile radio communication system (fig.1, 5, paragraph 0075-0076, 0078), comprising:

- (A) receiving a signal corresponding to a mobile unit transmitting signal (fig.1, 6, paragraph 0007, 0070);
- (B) generating a first signal by using a first filter unit to filter said signal (fig.4-5, paragraph 0010, 0075-0076), said first filter unit having a first cut-off frequency (paragraph 0005, 0068);

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- (C) obtaining a first speed by estimating said movement speed based on said first signal (fig.3-5, paragraph 0067-0068);
- (D) generating a second signal by using a second filter unit to filter said signal (fig.4-5, paragraph 0010, 0075-0076), said second filter unit having a second cut-off frequency (paragraph 0005, 0068);
- (E) obtaining a second speed by estimating said movement speed based on said second signal (fig.3-5, paragraph 0067-0068); and
- (F) selecting one of said first speed and said second speed to be said movement speed (fig.5-6, paragraph 0076-0077).

Regarding claim 9, Subrahmanya teaches a system for estimating a movement speed of a mobile unit (fig.1, 5, paragraph 0075-0076, 0078), comprising:

a receiving unit for receiving a signal corresponding to a transmitting signal of said mobile unit (fig.1, 6, paragraph 0007, 0078);

a first filter unit for filtering said signal to generate a first signal (fig.4-5, paragraph 0010, 0075-0076), said first filter unit having a first cut-off frequency (paragraph 005, 0068);

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a second filter unit for filtering said signal to generate a second signal (fig.4-5, paragraph 0010, 0075-0076), said second filter unit having a second cut-off frequency (paragraph 005, 0068);

an estimated unit for obtaining a first speed by estimating said movement speed based on said first signal (fig.3-5, paragraph 0067-0068), and obtaining a second speed by estimating said movement speed based on said second signal (fig.3-5, paragraph 0067-0068); and

a selecting unit for selecting one of said first speed and said second speed to be said movement speed (fig.4-5, paragraph 0076-0077).

Regarding claim 10, Subahmanya teaches the system of claim 9, wherein said selecting unit defines a predetermined speed (fig.4-6, paragraph 0076-0078).

# Allowable Subject Matter

3. Claims 2-8, 11-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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#### Citation of Pertinent Prior Art

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Anthony Peter Hulbert (GB-2276064A) disclose Carrier recovery in a digital radio link between a fixed and a mobile radio unit.

**Kubo et al.** (U.S.Pub-20030003914) discloses Apparatus and method for controlling communications based on moving speed.

Sih et al. (U.S.Pub-20030176201 discloses Velocity responsive time tracking.

**Brouwer** (U.S.Pub-20050095989) discloses System and method for speed indication through transmit power control commands.

Ben Rached et al. (U.S.Pub-20040097196) discloses Method and device for evaluating the energy level of radio signal.

Haapoja et al. (U.S.Pub-20040002306) discloses Method and apparatus providing adaptable current consumption for mobile station based on macrocell/mircocell determination.

Qui et al. (U.S.Pub-20030198285) discloses method and apparatus for estimating speed-adapted channel.

Chia (U.S.Pat-5396253) discloses Speed estimation.

Westman (U.S.Pat-6680967) discloses Receiver.

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**Da Rocha et al.** (U.S.Pub-20020042279) discloses Receiver device for a mobile radiocommunication unit employing a speed estimator.

**Juncker et al.** (U.S.Pub-20040097197) discloses Mobile station speed estimation.

#### **Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M Nguyen whose telephone number is 571.272.7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571.272.7922. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Khai Nguyen Au: 2687

5/24/2005

ELISEO RAMOS-FELICIANO
PATENT EXAMINER